

IN THE ABSTRACT

Please cancel the present Abstract and substitute the rewritten Abstract as follows:

ABSTRACT

A data processor including one or more functional units, one or more register files, a data memory, and a snapshot buffer which during the handling of an interrupt condition accommodates to save state information of various processor state elements in respective snapshot buffer elements. The data processor including a controller that is arranged to save the contents of the snapshot buffer elements in a data memory facility having a multibit access port facility upon a subsequent interrupt condition that occurs during the handling of an actual interrupt condition without requiring additional instruction bits for addressing the snapshot buffer elements or the data memory facility.